

She had no prior interest in flying, she said, but "that was one of the things Kyle made sure to talk about when he was pitching me."

"And I was like: 'Yeah, I don't have that kind of time. I have three kids,'" she said.

After changing her mind and getting her pilot's license through the employee program, however, Ms. Vu began competing in aerial acrobatic competitions. As an engineer, she said, flying helps her address safety concerns. "If I'm building this, would I fly it?" said Ms. Vu, who said she considered herself a conservative pilot, although, she admits, "I was kind of surprised how much I enjoyed flying upside down."

#### THE FUTURIST AND THE TEST PILOT

Is the world ready for wingless hovercraft levitating over cities and hotrodding through congested air corridors?

The consensus within the industry is that the F.A.A., which regulates half the world's aviation activity, is several years from certifying urban air mobility.

"It's a big burden of proof to bring new technology to the F.A.A.—appropriately so," Mr. Clark said. Currently the certification process for a new plane or helicopter takes two to three years on average. For an entirely new type of vehicle, it could be considerably longer. (One conventionally powered aircraft that can take off and land without a runway had its first flight in 2003. It remains uncertified.)

Ms. Rothblatt has built a career out of the long view. She is a celebrated futurist who has argued passionately for transhumanism, or the belief that human beings will eventually merge with machines and upload consciousness to a digital realm. And she has taken positions on issues such as xenotransplantation—the interchange of organs between species, including humans—considered audacious not long ago, though no longer.

Yet in certain ways she and Mr. Clark make for unlikely partners. Mr. Clark has a familiar demeanor for a test pilot: exuberant, risk-taking, hyper-confident.

Ms. Rothblatt, on the other hand, calls herself an exceedingly cautious person, both as a pilot and in general. "I'm an adventurous thinker, but I'm cautious in everything," she said. She brought up her life experience as an example. Aside from her accomplishments in medicine and aerospace, Ms. Rothblatt is known as a transgender pioneer; when she started Sirius XM and rose to prominence, she hadn't yet transitioned. "When I changed my sex, it was only after watching presentations by a dozen top surgeons and I was absolutely confident that it would be safe," she said.

The dichotomy between the futurist and the test pilot gets to a real issue facing any plane with a battery: Who will fly them?

According to Dan Patt, a technology analyst, vehicles like the one Beta is building are "very unlikely to make money unless they go unmanned." Aviation in general faces a pilot shortage, and labor comprises up to a third of operating costs at legacy airlines.

The question for Beta as a business, said Mr. Patt, who led the development of drones for the Defense Advanced Research Projects Agency, is: "What does it take for their model to be competitive with ground transportation?"

Beta says its vehicles are designed to be "optionally manned" in the future. Yet analysts such as Mr. Patt see unpiloted commercial aviation as even farther from winning F.A.A. approval than the electric plane itself, raising a dilemma:

"What's more important, going unmanned first, or do you build the vehicle first? Beta is clearly in the latter camp."

Nathan Diller, an Air Force colonel, is not a futurist, but his job is to find and support companies doing forward-thinking, futuristic things.

The military applications of a vehicle like the Alia—especially logistics—have gotten attention at the highest levels of the Air Force, which has backed Beta and some of its peers through an accelerator called Agility Prime.

Last month, for the first time, uniformed Air Force pilots flew an Alia, soaring above Lake Champlain in a plane powered only by a battery.

Colonel Diller sees this kind of transport as a national security issue, in part because of its potential to reduce fuel consumption, but what seems to intrigue him most is "the democratization of air travel."

He grew up flying experimental planes on an organic farm in West Texas, aware of the limits on where a plane can land and who can fly. Looking at a floating sculpture twirling above a lake, he sees a different future for aviation: "Everyone a pilot, everywhere a runway."

#### VOTE EXPLANATION

Mr. REED. Mr. President, I was unavoidably absent for rollcall vote No. 200, the confirmation of Executive Calendar No. 857, Evelyn Padin, of New Jersey, to be U.S. District Judge for the District of New Jersey. Had I been present, I would have voted yea.

I was unavoidably absent for rollcall vote No. 201, the confirmation of Executive Calendar No. 915, Charlotte N. Sweeney, of Colorado, to be U.S. District Judge for the District of Colorado. Had I been present, I would have voted yea.

I was unavoidably absent for rollcall vote No. 202, the motion to invoke cloture on Executive Calendar No. 806, Sandra L. Thompson, of Maryland, to be Director of the Federal Housing Finance Agency. Had I been present, I would have voted yea.

#### VOTE EXPLANATION

Mr. HAWLEY. Mr. President, had there been a recorded vote, I would have voted no on S. Res. 134, a resolution expressing the sense of the Senate that the President should work with the Government of the United Kingdom to conclude negotiations for a comprehensive free trade agreement between the United States and United Kingdom.

#### ARMS SALES NOTIFICATION

Mr. MENENDEZ. Mr. President, section 36(b) of the Arms Export Control Act requires that Congress receive prior notification of certain proposed arms sales as defined by that statute. Upon such notification, the Congress has 30 calendar days during which the sale may be reviewed. The provision stipulates that, in the Senate, the notification of proposed sales shall be sent to the chairman of the Senate Foreign Relations Committee.

In keeping with the committee's intention to see that relevant informa-

tion is available to the full Senate, I ask unanimous consent to have printed in the RECORD the notifications which have been received. If the cover letter references a classified annex, then such annex is available to all Senators in the office of the Foreign Relations Committee, room SD-423.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

DEFENSE SECURITY  
COOPERATION AGENCY,  
Arlington, VA.

HON. ROBERT MENENDEZ,  
Chairman, Committee on Foreign Relations,  
U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of Section 36(b)(1) of the Arms Export Control Act, as amended, we are forwarding herewith Transmittal No. 21-33 concerning the Army's proposed Letter(s) of Offer and Acceptance to the Government of Egypt for defense articles and services estimated to cost \$691 million. After this letter is delivered to your office, we plan to issue a news release to notify the public of this proposed sale.

Sincerely,

JAMES A. HURSCH,  
Director.

Enclosures.

TRANSMITTAL NO. 21-33

Notice of Proposed Issuance of Letter of Offer Pursuant to Section 36(b)(1) of the Arms Export Control Act, as amended

(i) Prospective Purchaser: Government of Egypt.

(ii) Total Estimated Value:

Major Defense Equipment\* \$662 million.

Other \$29 million.

Total \$691 million.

Funding Source: Foreign Military Financing (FMF).

(iii) Description and Quantity or Quantities of Articles or Services under Consideration for Purchase:

Major Defense Equipment (MDE):

Five thousand (5,000) TOW 2A, Radio Frequency (RF) Missiles, BGM-71E-4B-RF.

Seventy (70) TOW 2A, Radio Frequency (RF) Missiles, BGM-71E-4B-RF (Fly-to-Buy Lot Acceptance Missiles).

Non-MDE:

Also included is missile support equipment; technical manuals/publications; spare parts; tool and test equipment; training; U.S. Government technical and logistical support, contractor technical support, and other associated equipment and services; and other related elements of logistical and program support.

(iv) Military Department: Army (EG-B-VJO).

(v) Prior Related Cases, if any: EG-B-VCO.

(vi) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be Paid: None known.

(vii) Sensitivity of Technology Contained in the Defense Article or Defense Services Proposed to be Sold: See Attached Annex.

(viii) Date Report Delivered to Congress: May 19, 2022.

\*As defined in Section 47(6) of the Arms Export Control Act.

#### POLICY JUSTIFICATION

Egypt—TOW 2A Radio Frequency (RF) Missiles and Support

The Government of Egypt has requested to buy five thousand (5,000) TOW 2A, Radio Frequency (RF) missiles, BGM-71E-4B-RF; and seventy (70) TOW 2A, Radio Frequency (RF) missiles, BGM-71E-4B-RF (Fly-to-Buy Lot Acceptance missiles). Also included is missile support equipment; technical manuals/publications; spare parts; tool and test